

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S2	25	"6130145"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/26 19:32
S3	47	"5913145"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/26 19:50
S4	45047	(substrate or wafer) and (oxide or (gate insulat\$3)) and ((Tungsten nitride) or (tungsten carbide) or (tungsten silicide) or WSi or WN or WC)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:00
S5	1240	((((Tungsten nitride) or (tungsten carbide) or (tungsten silicide) or WSi or WN or WC) with (onto or on or over or above) with (oxide or (gate insulat\$3)) ) and S4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:02
S6	252	((poly or (poly Si) or (poly silicon) or (polycrystalline silicon) or (polycrystalline Si)) with (onto or on or above or over) with ((Tungsten nitride) or (tungsten 1carbide) or (tungsten silicide) or WSi or WN or WC)) and S5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:03
S8	8	((poly or (poly Si) or (poly silicon) or (polycrystalline silicon) or (polycrystalline Si)) adj3 (onto or on or above or over) adj3 ((Tungsten nitride) or (tungsten 1carbide) or (tungsten silicide) or WSi or WN or WC)) and S5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:33

S9	0	((poly or (poly Si) or (poly silicon) or (polycrystalline silicon) or (polycrystalline Si)) adj2 (onto or on or above or over) adj2 ((Tungsten nitride) or (tungsten 1carbide) or (tungsten silicide) or WSi or WN or WC))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:39
S10	9	((poly or (poly Si) or (poly silicon) or (polycrystalline silicon) or (polycrystalline Si)) adj3 (onto or on or above or over) adj3 ((Tungsten nitride) or (tungsten 1carbide) or (tungsten silicide) or WSi or WN or WC))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:39
S11	47021	((tungsten carbid) or WC)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:48
S12	6090	(substrate or wafer) and (oxide or (gate insulat\$)) and S11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:49
S13	3	"W(CO)" and S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:49
S15	7	((tungsten carbid) or WC) with ( onto or over or above or on) with (poly or (poly Si) or (poly silicon) or (polycrystalline silicon) or (polycrystalline Si))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 12:53
S16	287943	(precursor or carrier) with (carbon or C)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:38
S17	16416	((precursor or carrier) with (Silicon or Si) ) and ((precursor or carrier) with (carbon or C) ) and ((precursor or carrier) with (nitrogen or N))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:41

S18	1113	(substrate or wafer) and ((gate oxide) or (gate insulat\$3)) and S17	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:41
S19	835219	(precursor or carrier or source) with (metal or Tungsten or titanium or tantalum or cobalt or Co or W or Ti or Ta or Mo or Re or Ru or Ni or nickle or ruthenium or molybdenum )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:45
S20	916	S18 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:45
S21	130	(ethylene or allyl alcohol or (formic acide) or (tetrahydrofuran)) and S20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:48
S22	76945	(precursor or carrier) with (carbon )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:57
S23	1308	(substrate or wafer) and ((gate oxide) or (gate insulat\$3)) and S22	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:57
S24	997	S19 and S23	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:58
S25	194	(ethylene or (allyl alcohol) or (formic acide) or (tetrahydrofuran)) and S24	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 17:58

S26	20	("6218711"   "6352872"   "6395589"   "6406951"   "6492694"   "6537369"   "6603156"   "6624483"   "6727550").PN. OR ("6909186").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/05/27 18:53
S27	35	((WN) or (tungsten nitride)) same (dop\$3 or impalnt\$5 ) same carbon same gate	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/05/27 19:25
S28	8	((WCN) or (tungsten carbon nitride)) same barrier same gate	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/05/27 19:48
S29	196	((WCN) or (tungsten carbon nitride)) same barrier	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/05/27 19:55
S30	5	((tungsten silicide) or WSi) and (poly or (poly Si) or (poly silicon) or (polycrystalline silicon) or (polycrystalline Si)) and S29	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/05/27 19:56
S31	7	((metal Silicide) or ((titanium or tantalum or ruthenium or nickle or molybdenum or Cobalt or W or Ta or Ti or Co or Ni or Re or Ru or Mo) silicide)) and (poly or (poly Si) or (poly silicon) or (polycrystalline silicon) or (polycrystalline Si)) and S29	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/05/27 20:02
S32	115	((metal carbon nitride) or ((titanium or tantalum or ruthenium or nickle or molybdenum or Cobalt or W or Ta or Ti or Co or Ni or Re or Ru or Mo) ((carbon nitride) or (CN))) same barrier and gate	US-PGPUB; USPAT; USOCR	ADJ	ON	2010/05/27 20:04
S35	2	JP "2003273350"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 21:01
S36	3	"20050110098"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 21:02

S37	127	(work function) with control \$4 with (CONTENT OR AMOUNT OR RATIO OR CONCENTRATION ) WITH (N or Si or nitrogen or silicon)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 21:12
S38	133	"6027961"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 21:28
S41	2	jp "10303412"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/27 21:50
S43	267	(ammonia or "NH.sub.3") and (W(CO)".sub.6") and gate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/28 06:31
S44	2	"20010014521"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/05/28 07:17
S45	80	"5654237" "5470791" "5304510" "5192714"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/05/28 08:39
S46	19	carbon and S45	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/05/28 08:40
S47	2281	(257/288).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:11
S48	278	(257/388).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:11
S49	341	(257/407).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:11
S50	1246	(257/412).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:11
S51	563	(257/413).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:11

S52	634	(257/e29.16).OCL.S.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:13
S53	305	(257/e29.161).OCL.S.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:13
S54	506	(257/e21.621).OCL.S.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:13
S55	274	(257/e21.622).OCL.S.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:14
S56	335	(257/e21.623).OCL.S.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:14
S57	526	(257/e21.635).OCL.S.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:14
S58	720	(257/e21.636).OCL.S.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:14
S59	1563	(257/e21.637).OCL.S.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/05/28 09:14
S60	99	(work function) with ((WSI or (tungsten silicide))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/11/10 14:29
S61	24	(work function) with ((WSI or (tungsten silicide)) with (content or amount or ratio or concentration)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2010/11/10 17:58
S63	171	gate with (electrode or metal or material compound) with WC\$2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 13:25
S64	733061	(precursor or carrier or source) with (carbon or C)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 14:21
S65	763716	((precursor or carrier or source) with (Silicon or Si) ) or ((precursor or carrier or source) with (nitrogen or N))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 14:22

S66	609685	(precursor or carrier or source) with (Tungsten or titanium or tantalum or cobalt or Co or W or Ti or Ta or Mo or Re or Ru or Ni or nickle or ruthenium or molybdenum )	US-PGRUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 14:23
S67	115962	S64 and S65 and S66	US-PGRUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 14:23
S68	88	gate near7 (WCN or WSC or WCON or TaCON or TiCN or TaCN or (tungsten carbon nitride) or (tungsten silicon carbide))	US-PGRUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 14:25
S69	15	S67 and S68	US-PGRUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 14:25
S70	2848	(gate near7 (CVD or ALD or (chemical vapor deposition) or (atomic layer deposition))) and S67	US-PGRUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 14:34
S71	67	("W(CO)" or carbonyl) and S70	US-PGRUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 14:35
S72	194454	(precursor or carrier or source) with (carbon )	US-PGRUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 15:58
S73	253449	((precursor or carrier or source) with (Silicon or Si) )	US-PGRUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 15:59

S74	609053	((precursor or carrier or source) with (nitrogen or N))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 15:59
S75	24334	S72 and (S73 or S74) and S66	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 16:00
S76	1	(WCN or TaCN or TiCN or WSIC or WCON or TaCON or RuCN or RuSiN or MoSiC or MoCN).ti. and S75	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 16:01
S77	1	((Tungsten carbon nitride) or (tungsten silicon carbide)).ti. and S75	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 16:03
S78	270	(WCN or WSIC or WCON or TaCON or TiCN or TaCN or RuCN or MoCN or MoSiC or RuSiC or (tungsten carbon nitride) or (tungsten silicon carbide) or (ruthenium carbon nitride) or (ruthenium silicon carbide) or (molybdenum silicon carbide) or (molybdenum carbon nitride)) and S75	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 16:10
S79	38	("20030032281"   "20030049931"   "20030104126"   "20030123216"   "20030127043"   "20030153181"   "20030157760"   "20030161952"   "20030181035"   "20030194825"   "20030203616"   "3708728"   "4058430"   "4565747"   "5281274"   "5306666"   "5316793"   "5342652"   "5382333"   "5438028"   "5603771"   "5691235"   "5711811"   "5723384"   "5744254"   "5789024"   "5915004"   "5916365"   "5946598"	US-PGPUB; USPAT; USOCR	ADJ	ON	2011/04/22 16:55



		"5964943"   "5972430"   "6006763"   "6099904"   "6156382"   "6162501"   "6206967"   "6287965"   "6380627").PN.				
S80	0	"W(CO)" with "WF.sub.6" with (advantag\$4 or improv \$3 or increas\$3 or reduc\$3 or enhanc\$3 or lower or decreas\$3or avoid\$3 ) with (tungsten or W) with (precursor or source or carrier)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:05
S81	0	"W(CO)" with "WF.sub.6" with (advantag\$4 or improv \$3 or increas\$3 or reduc\$3 or enhanc\$3 or lower or decreas\$3or avoid\$3 ) with (tungsten or W)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:06
S82	0	"W(CO)" with "WF.sub.6" with (advantag\$4 or improv \$3 or increas\$3 or reduc\$3 or enhanc\$3 or lower or decreas\$3or avoid\$3 )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:06
S83	45	"W(CO)" with (advantag\$4 or improv\$3 or increas\$3 or reduc\$3 or enhanc\$3 or lower or decreas\$3or avoid \$3 )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:06
S84	0	"W(CO)" with over with "WF.sub.6"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:07
S85	0	"W(CO)" with "WF.sub.6"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:08
S86	1	"W(CO).sub.6" with "WF. sub.6"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:08

S87	65	"WF.sub.6" with corrosive	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:09
S88	0	"W(OO)" with "WF.sub.6"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:11
S89	357	W(OO)".sub.6" with "WF.sub.6"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:11
S90	208	gate and S89	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:12
S91	85	source and drain and S90	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:12
S92	6	Workfunction with content with (N or Si or nitrogen or Silicon) with gate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:40
S93	2	"5164805".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 18:53
S94	2	"20030082296".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2011/04/22 19:20

4/ 22/ 2011 8:24:04 PM

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